

REMARKS

Claims 1 and 5 have been clarified to feature C-terminal and N-terminal ends. Claims 3 and 7 have been revised to replace the article “a” with “the” and to make the term “nucleotide” plural where necessary. Claims 4 and 8 have been clarified to feature C-terminal ends.

No new matter has been introduced, and entry of the above revised claims is respectfully requested.

Claim Objections

The present action objects to claims 1 and 5 due to a grammatically incorrect recitation of “the C-terminal or N-terminal of said EGF.” These claims have been revised to feature C-terminal and N-terminal ends. Applicants believe this objection has been overcome and may be withdrawn.

Claims 3 and 7 were objected to because of the incorrect use of the article “a” and because “nucleotide” should have been plural in the second lines of each claim. Revisions to address these objections have been made and Applicants believe this objection may now be withdrawn.

Claims 4 and 8 were revised to feature C-terminal ends. Applicants believe this objection has been overcome and may be withdrawn.

Allowable Subject Matter

The present action indicates that claims 3 and 7 are free of prior art as set forth on page 6. Applicants understand therefore that claims 3 and 7 are subject to allowance in due course if claims 1 and 5 are respectively allowed, or in the alternative, claims 3 and 7 would be subject to allowance in due course if rewritten in independent form. Applicants respectfully request confirmation of this understanding in the next Office communication.

Alleged rejection under 35 U.S.C. §103

Claims 1, 2, 4-6 and 8 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Hooker et al. (WO 01/79442) in view of Rosen et al. (WO 98/21348), and further in view of Sijmons et al. (U.S. Patent No. 5,716,802).

Applicants have examined the statement of rejection and the references and respectfully traverse for the following reasons.

The cited references do not provide one of skill in the art with a reasonable expectation of success in combining the references to result in the present invention. Hooker et al. mention the fusion of EGF with another protein for the purpose of increasing the efficiency of production, but not for increasing the stability of the compound. Similarly, the Sijmons reference reports the combination of HSA with a peptide that increases the efficiency of production of HSA in plants, but not for stability purposes. Therefore, there would be no expectation of success in combining these references with the Rosen document because the purpose of the fusion protein in the documents are different.

Furthermore, the expression system in reported by Rosen et al. is quite different than the system in the present invention. Rosen et al. report relates to the expression system for producing heterologous protein from plants through cultivating transformed whole plants or plant cells with a model protein of HSA. In other words, Rosen et al. aim to excrete through plant cells plasma membrane, recombinant proteins which are identical with their original form by using plant signal peptides and regulatory sequences. (See claims 1, 2 and 8 of the Rosen document.) The refining process of the Rosen document also uses columns linking anti-HSA to agarose, which is expensive and impractical. Therefore, one of skill in the art would not turn to Rosen to teach the fusion of EGF and HSA or to teach a method of producing the fusion protein in an economical and efficient way.

For the above reasons, Applicants respectfully request reconsideration and withdrawal of the present rejection.

Conclusion

It is believed that the application is now in condition for allowance. Applicants request the Examiner to issue a notice of Allowance in due course. The Examiner is encouraged to contact the undersigned to further the prosecution of the present invention.

Application No.
10/520,388

Patent
20050-00004

The Commissioner is authorized to charge JHK Law's Deposit Account No. **502486** for any fees required under 37 CFR §§ 1.16 and 1.17 and to credit any overpayment to said Deposit Account No. **502486**.

Respectfully submitted,

JHK Law

Dated: April 29, 2008

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